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10/728,083	12/04/2003	Masashi Hamada	CANO:102	7661

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EXAMINER

SHEDRICK, CHARLES TERRELL

ART UNIT	PAPER NUMBER
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2687

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/728,083	Applicant(s) HAMADA, MASASHI	
	Examiner Charles Shedrick	Art Unit 2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/4/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter.

The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claims 14, claims the non-statutory subject matter of a program. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Therefore, since the claimed programs are not tangibly embodied in a physical medium, encoded on a computer-readable medium and clearly recited as a computer program then the Applicants has not complied with 35 U.S.C 101.

DETAILED ACTION

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim Rejections - 35 USC § 103

Claims 1-11,13,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wilkes et al.**

US Pub No. 2003/0058818 A1 in view of **Lin et al. US Pub. No. 2004/0177377**.

Consider **claim 1**, **Wilkes et al.** clearly show and disclose a wireless base station **210 (figure 2)** that constructs a wireless communication network **240 (figure 2)**, comprising: recognizing means **350, 310** (either interface can be used based on the origin) (**figure 3**); and setting means for setting **320, 330** (i.e., the base station can join the network or participate with other base stations joining the network automatically or via manual communication thus constructing a network by setting and recognizing means) (**figure 3**) (**paragraphs 0031,0035,0042**).

However, **Wilkes et al.** do not clearly disclose the network constructs using system identification codes.

In the same field of endeavor, **Lin et al.**, constructs a network using a system identification code used by another wireless station, based on the system identification code

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recognized by said recognizing means (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2** and **paragraphs 0016, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station network constructs of Wilkes et al. to comply with the IEEE 802.11 specification and recognize an SSID for the purpose of extending the base stations to a WLAN environments. If the base station wireless interfaces of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to modify the SSID as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 2** and as applied to **claim 1** above, **Wilkes et al.** clearly show and disclose a wireless base station **210_1** (**figure 2**) further comprising: first receiving means **350, 310** (either interface can be used based on the origin) (**figure 3**) for receiving a notification signal (i.e., a response to a DHCP broadcast or protocol advertisement) from the other wireless base station **210_2** (**figure 2**) (**paragraph 0048**); and wherein said recognizing means recognizes the identification used by the other wireless base station based on the notification signal received by said first receiving means (**paragraphs 0031, 0035, 0042**) .

However, Wilkes et al. do not clearly disclose a system identification code wherein said recognizing means recognizes the system identification code.

In the same field of endeavor, Lin et al., constructs a network using a system identification code used by another wireless station, based on the system identification code recognized by said recognizing means (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2** and **paragraphs 0016, 0026, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station network constructs of Wilkes et al. to comply with the IEEE 802.11 specification and recognize an SSID for the purpose of extending the base stations to a WLAN environments. If the base station wireless interfaces of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to modify the SSID as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 3** and **as applied to claim 1 above, Wilkes et al.** as modified by **Lin et al.** clearly show and disclose a wireless base station **210_1 (figure 2)** further comprising: A second receiving means **350, 310** (either interface can be used based on the origin) (**figure 3**) for receiving a signal from a communication apparatus (i.e., mobile station) **1420 (figure 14)** whose communication is controlled by the other wireless base station **210_2 (figure 2)**; and said recognizing means **350, 310** (either interface can be used based on the origin) (**figure 3**) recognizes other wireless base station based on the signal received by said second receiving means(**paragraphs 0056 and 0101**).

However, Wilkes et al. do not clearly disclose a system identification code wherein said recognizing means recognizes the system identification code used by the other base station.

In the same field of endeavor, Lin et al., discloses a system identification code used by another wireless station, wherein said recognizing means (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2**) recognizes the system identification code used by the other wireless station **paragraphs 0016, 0026, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station of Wilkes et al. to comply with the IEEE 802.11 specification and recognize an SSID for the purpose of extending the base stations to a WLAN environment. If the base station wireless interfaces of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to recognize the SSID as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 4** and **as applied to claim 3 above, Wilkes et al.** as modified by **Lin et al.** clearly show and disclose a wireless base station **210_1 (figure 2)** wherein said second receiving means **350, 310** (either interface can be used based on the origin) (**figure 3**) receives a response signal responsive to a request from the wireless base station (**paragraphs 0048,0054 and 0102**).

Consider **claim 5** and **as applied to claim 1 above, Wilkes et al.** clearly discloses a wireless base station **210 (figure 2)** wherein said setting means sets a IP address different to the IP address recognized by said recognizing means (i.e., The base station looks for IP addresses or other forms of system ID that are assigned in the network. Once the base station understands the system identification allocation it automatically or manually assigns itself some form of identification in order to join the network (**paragraphs 0039 –0049**).

However, Wilkes et al. do not disclose a system identification code being recognized and set.

In the same field of endeavor, Lin et al., discloses a system identification code used by another wireless station, wherein said recognizing means (i.e., wireless stations using the WLAN

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transmission standard **21,22,23**) (**figure 2**) recognizes the system identification code used by the other wireless station and modifies the SSID based on the SSID that was recognized (**paragraphs 0016, 0026, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station of Wilkes et al. to comply with the IEEE 802.11 specification, recognize an SSID as taught by Lin et al. and then modify it for the purpose of extending the base stations to a WLAN environments. If the base station wireless interfaces of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to recognize the SSID as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 6** and as applied to **claim 1** above, **Wilkes et al.** as modified by **Lin et al.** clearly disclose a wireless base station **210** (**figure 2**) further comprising: generating means **320** (**figure 3**) for generating an IP address; and wherein said setting means sets the IP address generated by said generating means based on the IP address recognized by said recognizing means (**paragraphs 0034 and 0035**).

However, Wilkes et al. do not disclose a system identification code being generated.

In the same field of endeavor, Lin et al., discloses a generating means for a system identification code (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2**) (**paragraphs 0016, 0026, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station of Wilkes et al. to comply with the IEEE 802.11 specification, generate an SSID as taught by Lin et al. for the purpose of extending

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the base stations to a WLAN environments. If the base station of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to generate the SSID as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 7** and **as applied to claim 6 above**, **Wilkes et al.** clearly disclose a wireless base station **210 (figure 2)** wherein said generating means **320 (figure 3)** generates an IP address different to the IP address previously generated, based on the IP address previously recognized by said recognizing means (i.e., The base station looks for IP addresses or other forms of system ID that are assigned in the network. Once the Base station understands the system identification allocation it automatically or manually assigns itself some form of identification in order to join the network. It is also well known in the art that DHCP as well as other protocols can assign based on a rules such as lease expiration in order to prevent the previously assigned address being re-assigned (**paragraphs 0039 –0049**).

However, Wilkes et al. do not disclose a system identification code being generated.

In the same field of endeavor, Lin et al., discloses a generating means for a system identification code (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2**) (**paragraphs 0016, 0026, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station of Wilkes et al. to comply with the IEEE 802.11 specification, generate an SSID as taught by Lin et al. for the purpose of extending the base stations to a WLAN environments. If the base station of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to generate the SSID as

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taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 8** and **as applied to claim 6 above, Wilkes et al.** clearly disclose the claimed invention except the generating means does not specifically disclose generating a system identification code(**paragraph 0042**)..

In the same field of endeavor, Lin et al., discloses a generating means for a system identification code (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2**) (**paragraphs 0016, 0026, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station of Wilkes et al. to generate a SSID as taught by Lin et al. for the purpose of **automating the generation** of SSID's and extending the base stations to a WLAN environments. If the base station of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to generate the SSID as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 9** and **as applied to claim 6 above, Wilkes et al.** clearly disclose the claimed invention except the generating means does not specifically disclose generating a system identification code(**paragraph 0042**).

In the same field of endeavor, Lin et al., discloses a generating means for a system identification code (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2**) (**paragraphs 0016, 0026, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station of Wilkes et al. to generate a SSID as taught by Lin et al. for the purpose of generation of SSID's based on the **operation of a user (i.e., manual configuration)** and extending the base stations to a WLAN environments. If the base station of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to generate the SSID as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 10** and **as applied to claim 1 above, Wilkes et al.** clearly discloses the claimed invention except the recognize means does not specifically disclose recognizing a system identification code used by a plurality of channels.

In the same field of endeavor, Lin et al., discloses a generating means for a system identification code recognize means does not specifically disclose recognizing a system identification code used by a plurality of channels (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2**) (**paragraphs 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station of Wilkes et al. to recognize an SSID used by a plurality of channels as taught by Lin et al. for the purpose of extending the base stations to a WLAN environments. If the base station of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to recognize the SSID used by a plurality of channels as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

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Consider **claim 11** and **as applied to claim 1 above, Wilkes et al.** clearly disclose the claimed invention except for clearly identifying a system identification code that is a Service Set Identifier for use in a wireless LAN communication according to IEEE.802.11 Standard.

In the same field of endeavor, Lin et al. clearly disclose a system identification code that is a Service Set Identifier for use in a wireless LAN communication according to IEEE.802.11 Standard (**paragraph 0027**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wireless base station of Wilkes et al. to include a system identification code that is a Service Set Identifier for use in a wireless LAN communication according to IEEE.802.11 Standard as taught by Lin et al. for the purpose of extending the base stations to a WLAN environments. If the base station of Wilkes et al. were slightly modified to comply with the IEEE 802.11 then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Consider **claim 13, Wilkes et al.** clearly show and disclose a control method (i.e., control of the base stations being added to the network, how the base stations communicate while being added can be controlled based on the methods disclosed) for a wireless base station **210 (figure 2)** that constructs a wireless communication network **240 (figure 2)**, comprising: recognizing step (**paragraphs 0039-0049**) of receiving; and setting step for setting (**paragraphs 0039-0049**) (i.e., the base station can join the network or participate with other base stations joining the network automatically or via manual communication thus constructing a network by setting and recognizing means) (**figure 3**) (**paragraphs 0031,0035,0042**).

However, Wilkes et al. do not clearly disclose the control method using system identification codes.

In the same field of endeavor, Lin et al., discloses a control method (i.e., method of controlling real-time transmissions using a system identification code used by another wireless station) based on the system identification code recognized by said recognizing means (i.e., wireless stations using the WLAN transmission standard **21,22,23**) (**figure 2** and **paragraphs 0016, 0029, 0032, 0034, 0040**).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the control method of Wilkes et al. to comply with the IEEE 802.11 specification and recognize an SSID for the purpose of extending the base stations to a WLAN environments. If the base station wireless interfaces of Wilkes et al. were slightly modified to comply with the IEEE 802.11 specifications and modeled to control the SSID as taught by Lin et al. then the base stations of Wilkes et al. could be used by WLAN in a plug and play type environment.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Wilkes et al. US Pub No. 2003/0058818 A1** in view of **Lin et al. US Pub. No. 2004/0177377** and in further view of well known prior art (**MPEP 2144**).

Consider claim 12 and as applied to claim 1 above, Wilkes et al. as modified by Lin et al. clearly disclose the claimed invention except that the base station is a access point for performing a wireless LAN communication according to IEEE 802.11 standard.

Nonetheless, the Examiner takes official notice of the fact that it is notoriously well known in the art that IEEE 802.11 access points are well known in the WLAN environment.

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Therefore as suggested by Wilkes et al. and modified by Lin et al., it would have been obvious to a person of ordinary skill in the art at the time the invention was made to operate the teachings of Wilkes et al. and Lin et al. for a IEEE 802.11 access point. Adding 802.11 capabilities to the base station would have added the ability of the base station to function as an 'access point'.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Shedrick whose telephone number is (571)-272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid Lester can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Shedrick
AU 2687
September 6, 2005


9/13/05
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SUPERVISORY PRIMARY EXAMINER